FOR QUALITY & EXCELLENCE IN HIGHER EDUCATION
Accredited by NAAC

BANGALORE UNIVERSITY
DEPARTMENT OF CIVIL ENGINEERING

Phone Off: 080-22961935 / 1946
E-mail: centrans9@gmail.com

JNANA BHARATHI
BANGALORE - 560 056

BUB/CTE/2014-15 **Date: 12-09-2014**

1. TESTING OF FINE AGGREGATES:

Sub: Testing of Fine Aggregates.
{Project*: Construction of RCC Drains at Kogilu Layout in Ward No.05, Byatarayanapura Sub-Division}

Ref.: Letter No. Testing/BUB/2014-15, dated 08-09-2014
Sample supplied to lab by: Assistant Executive Engineer,
Byatarayanapura Sub-Division,
BBMP, Bangalore
Name of the Agency*: KRIDL, Bangalore.

TABLE - 1.1 : SIEVE ANALYSIS :

IS Sieve Size, mm	Percentage Passing	Specification as Per IS: 383-1970(Reaffirmed 2002) Percentage Passing			Remarks
		Zone-I	Zone-II	Zone -III	
04.75	97.00	90-100	90-100	90-100	The Sample Conforms to Grading **Zone-II**
02.36	86.30	60-95	75-100	85-100	
01.18	75.40	30-70	55-90	75-100	
600. mic	48.00	15-34	35-59	60-79	
300.mic	19.00	5-20	8-30	12-40	
150.mic	2.90	0-10	0-10	0-10	

TABLE 1.2 ;

Sl No	Test Conducted	Sample	Results	Requirements as Per IS. Specification IS :383-1970 (Reaffirmed 2002)
1	Silt Content	001	1.44%	Not more than 8%
2.	Specific Gravity	----	2.55	-------

*As Furnished by Client.

The Results relate only to the items tested.

G.R. HARISH
Professor
Department of Civil Engineering
Jnana Bharathi Compus
BANGALORE UNIVERSITY
Bangalore-560 056.

12/09/2014
Dr. MANJESH .L
ME (Civil Engg.), Ph D MISTE.MIRC
Associate Professor
Department of Civil Engineering
Bangalore University Jnanabharathi Campus
BANGALORE- 560 056
e- mail. manjeshl@yahoo.com

Assistant Executive Engineer
Byatarayanapura Sub Division
B.B.M.P. Bangalore

FOR QUALITY & EXCELLENCE IN HIGHER EDUCATION
Accredited by NAAC

BANGALORE UNIVERSITY
DEPARTMENT OF CIVIL ENGINEERING

Phone Off: 080-22961935 / 1946
E-mail: centrans9@gmail.com

JNANA BHARATHI
BANGALORE - 560 056

BUB/CTE/2014-15

Date: 17-09-2014

1. TEST REPORT ON CEMENT:

Sub: Testing of 53 Grade Cement Sample (IS 12269-1987).
{Project*: Construction of RCC Drains at Kogilu Layout in Ward No.05, Byatarayanapura Sub-Division}

Ref.: Letter No. Testing/BUB/2014-15, dated 08-09-2014

Sample supplied to lab by: Assistant Executive Engineer,
Byatarayanapura Sub-Division,
BBMP, Bangalore

Name of the Agency*: KRIDL, Bangalore.

PHYSICAL TESTS ON CEMENT

Brand* : Birla Super
Grade * : 53
Type * : OPC
Date : 09-09-2014 to 16-09-2014

SL No	Name of Test	Results	Requirements as per IS 12269-1987
		Cement Sample	
1	Initial setting time	**150 min**	Shall not be less than 30 min
2	Final setting time	**250 min**	Shall not be more than 600 min
3	Fineness (by dry sieving on IS 90 micron sieve)	**2.40%**	Not to exceed 10.0%
4	Soundness test(by Le-Chatelier's method)	**1.60 mm**	Shall not be more than 10 mm
5	Compressive strength a) 3 days (average of three results) b) 7 days (average of three results)	**29.00 N/ Sq mm** **41.20 N/Sq mm**	Shall not be less than 27 N/Sqmm Shall not be less than 37N/Sqmm

*As Furnished by Client.

The Results relate only to the items tested.

G R HARISH
Professor
Department of Civil Engineering
Jnana Bharathi Compus
BANGALORE UNIVERSITY.
Bangalore-560 056.

Assistant Executive Engineer
Byatarayanapura Sub Divisio
B.B.M.P. Bangalore

17/09/14
Dr. MANJESH .L
ME (Civil Engg). Ph D MISTE.MIRC
Associate Professor
Department of Civil Engineering
Bangalore University Jnanabharath: Campus
BANGALORE- 560 056
e- mail. manjeshl@yahoo.com

FOR QUALITY & EXCELLENCE IN HIGHER EDUCATION
Accredited by NAAC

BANGALORE UNIVERSITY
DEPARTMENT OF CIVIL ENGINEERING

Phone Off: 080-22961935 / 1946
E-mail: centrans9@gmail.com

JNANA BHARATHI
BANGALORE - 560 056

BUB/CTE/2014-15

Date: 12-09-2014

1. TESTING OF COARSE AGGREGATES (40 mm):

Sub: Testing of Coarse Aggregates.
{Project*: Construction of RCC Drains at Kogilu Layout in Ward No.05, Byatarayanapura Sub-Division}

Ref.: Letter No. Testing/BUB/2014-15, dated 08-09-2014

Sample supplied to lab by: Assistant Executive Engineer,
Byatarayanapura Sub-Division,
BBMP, Bangalore

Name of the Agency*: KRIDL, Bangalore.

Table - 1.1 : SIEVE ANALYSIS :

IS Sieve Size, mm	Percentage passing	Requirements as per IS 383-1970 (Reaffirmed on 2002) % Passing	
	40 mm Sample	*Single size*	*Graded*
40mm	98.00	85-100	95 – 100
20mm	69.10	0 -20	30- 70
10mm	25.30	0 -5	10- 35
4.75mm	Nil	------	0 - 5

TABLE 1 2 :

SL No	Test conducted	Sample No	Results	Requirements as per IS:383-1970 & Test Conforms to IS 2386(Part I to IV) – 1963 (Reaffirmed on 2002)
1.	Flakiness Index	As above	16.40 %	Not to exceed 25 %
2.	Crushing value	----,,----	25.80 %	Not to exceed 45 % for concrete other than for wearing surfaces and 30% for concrete for wearing surfaces

*As Furnished by Client.

The Results relate only to the items tested.

G.R. HARISH
Professor
Department of Civil Engineering
Jnana Bharathi Campus
BANGALORE UNIVERSITY
Bangalore-560 056.

Assistant Executive Engineer
Byatarayanapura Sub Division
B.B.M.P. Bangalore

12/9/14
Dr. MANJESH .L
ME (Civil Engg .). Ph D MISTE.MIRC
Associate Professor
Department of Civil Engineering
Bangalore University Jnanabharathi Campus
BANGALORE- 560 056
e- mail manjeshl@yahoo.com

FOR QUALITY & EXCELLENCE IN HIGHER EDUCATION
Accredited by NAAC

BANGALORE UNIVERSITY
DEPARTMENT OF CIVIL ENGINEERING

Phone Off: 080-22961935 / 1946
E-mail: centrans9@gmail.com

JNANA BHARATHI
BANGALORE - 560 056

BUB/CTE/2014-15

Date: 12-09-2014

1. TEST REPORT ON PRE –CAST SOLID BLOCKS:

Sub: Testing of Pre-Cast Solid Block- Compressive strength.
{Project*: Construction of RCC Drains at Kogilu Layout in Ward No.05, Byatarayanapura Sub-Division}

Ref.: Letter No. Testing/BUB/2014-15, dated 08-09-2014

Sample supplied to lab by: Assistant Executive Engineer,
Byatarayanapura Sub-Division,
BBMP, Bangalore

Name of the Agency*: KRIDL, Bangalore.

RESULTS OF COMPRESSIVE STRENGTH ON PRE –CAST SOLID BLOCKS

SPECIMENS

TABLE 1. 1:-

Sl No	Dimensions of Specimen **mm**	Details	Cross Sectional Area **mm²**	Maximum Load in **KN**	Compressive Strength **N/ mm²**	**Average Compressive Strength N/ mm²**
1	400X 200X 200	Solid	80000	300	3.75	**3.81**
	----,,----	"	80000	315	3.93	
	----,,----	"	80000	300	3.75	

*As furnished by Client.
The Results relate only to the items tested.

G.R. HARISH
Professor
Department of Civil Engineering
Jnana Bharathi Compus
BANGALORE UNIVERSITY
Bangalore-560 056.

Dr. MANJESH .L
ME (Civil Engg .). Ph D MISTE.MIRC
Associate Professor
Department of Civil Engineering
Bangalore University Jnanabharathi Campus
BANGALORE- 560 056
e- mail manjesh@gmail.com

Assistant Executive Engineer
Byatarayanapura Sub Division
B.B.M.P. Bangalore

FOR QUALITY & EXCELLENCE IN HIGHER EDUCATION
Accredited by NAAC

BANGALORE UNIVERSITY
DEPARTMENT OF CIVIL ENGINEERING

Phone Off: 080-22961935 / 1946
E-mail: centrans9@gmail.com

JNANA BHARATHI
BANGALORE - 560 056

BUB/CTE/2014-15

DATE: 11-11-2014

1. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 28 days Compressive Strength).
{Project*: Construction of RCC Drains at Kogilu Layout in Ward No.05, Byatarayanapura Sub-Division}

Ref.: Letter No. Testing/BUB/2014-15, dated 10-11-2014

Sample supplied to lab by: Assistant Executive Engineer,
Byatarayanapura Sub-Division,
BBMP, Bangalore

Name of the Agency*: KRIDL, Bangalore.

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm

Grade of Concrete* : M_{15}

TABLE 1.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in Mm^2	Maximum Load in K.N	Compressive Strength (N/mm^2)	Avg. Value
1	001	13-10-14	10-11-14	28	22500	400	17.77	**17.55**
	002	"	"	"	"	385	17.11	
	003	"	"	"	"	400	17.77	

*As Furnished by Client.

The Results relate only to the items tested

11/11/2014

Dr. MANJESH .L
ME (Civil Engg .). Ph D MISTE.MIRC
Associate Professor
Department of Civil Engineering
Bangalore University Jnanabharathi Campus
BANGALORE- 560 056
e- mail. manjeshl@gmail.com

G.R. HARISH
Professor
Department of Civil Engineering
Jnana Bharathi Compus
BANGALORE UNIVERSITY
Bangalore-560 056.

Assistant Executive Engineer
Byatarayanapura Sub Division
B.B.M.P. Bangalore

FOR QUALITY & EXCELLENCE IN HIGHER EDUCATION
Accredited by NAAC

BANGALORE UNIVERSITY
DEPARTMENT OF CIVIL ENGINEERING

Phone Off: 080-22961935 / 1946
E-mail: centrans9@gmail.com

JNANA BHARATHI
BANGALORE - 560 056

BUB/CTE/2014-15

DATE: 14-11-2014

1. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 28 days Compressive Strength).
{Project*: Construction of RCC Drains at Kogilu Layout in Ward No.05, Byatarayanapura Sub-Division}

Ref.: Letter No. Testing/BUB/2014-15, dated 13-11-2014

Sample supplied to lab by: Assistant Executive Engineer,
Byatarayanapura Sub-Division,
BBMP, Bangalore

Name of the Agency*: KRIDL, Bangalore.

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE

CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm

Grade of Concrete* : M_{15}

TABLE 1.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in Mm^2	Maximum Load in K.N	Compressive Strength (N/mm^2)	Avg. Value
1	001	16-10-14	13-11-14	28	22500	410	18.22	**18.22**
	002	"	"	"	"	405	18.00	
	003	"	"	"	"	415	18.44	

*As Furnished by Client.

The Results relate only to the items tested

G.R. HARISH
Professor
Department of Civil Engineering
Jnana Bharathi Compus
BANGALORE UNIVERSITY
Bangalore-560 056.

14/11/2014
Dr. MANJESH .L
ME (Civil Engg.), Ph D MISTE.MIRC
Associate Professor
Department of Civil Engineering
Bangalore University Jnanabharathi Campus
BANGALORE- 560 05[illegible]
e- mail. manjeshl@gmail.com

Assistant Executive Engineer
Byatarayanapura Sub Division
B.B.M.P. Bangalore

FOR QUALITY & EXCELLENCE IN HIGHER EDUCATION
★ ★ ★ ★ ★
Accredited by NAAC

BANGALORE UNIVERSITY
DEPARTMENT OF CIVIL ENGINEERING

Phone Off: 080-22961935 / 1946
E-mail: centrans9@gmail.com

JNANA BHARATHI
BANGALORE - 560 056

BUB/CTE/2014-15

DATE: 17-11-2014

1. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 28 days Compressive Strength).
{Project*: Construction of RCC Drains at Kogilu Layout in Ward No.05, Byatarayanapura Sub-Division}

Ref.: Letter No. Testing/BUB/2014-15, dated 15-11-2014

Sample supplied to lab by: Assistant Executive Engineer,
Byatarayanapura Sub-Division,
BBMP, Bangalore

Name of the Agency*: KRIDL, Bangalore.

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE

CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm

Grade of Concrete* : M_{15}

TABLE 1.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in Mm^2	Maximum Load in K.N	Compressive Strength (N/mm^2)	Avg. Value
1	001	18-10-14	15-11-14	28	22500	395	17.55	**17.33**
	002	"	"	"	"	390	17.33	
	003	"	"	"	"	385	17.11	

*As Furnished by Client.

The Results relate only to the items tested

G.R. HARISH
Professor
Department of Civil Engineering
Jnana Bharathi Campus
BANGALORE UNIVERSITY.
Bangalore-560 056.

Dr. MANJESH .L
ME (Civil Engg). Ph D MISTE.MIRC
Associate Professor
Department of Civil Engineering
Bangalore University Jnanabharathi Campus
BANGALORE- 560 056
e- mail. manjeshl@yahoo.com

Assistant Executive Engineer
Byatarayanapura Sub Division
B.B.M.P. Bangalore

FOR QUALITY & EXCELLENCE IN HIGHER EDUCATION
Accredited by NAAC

BANGALORE UNIVERSITY
DEPARTMENT OF CIVIL ENGINEERING

Phone Off: 080-22961935 / 1946
E-mail: centrans9@gmail.com

JNANA BHARATHI
BANGALORE - 560 056

BUB/CTE/2014-15

DATE: 21-11-2014

1. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 28 days Compressive Strength).
{Project*: Construction of RCC Drains at Kogilu Layout in Ward No.05, Byatarayanapura Sub-Division}

Ref.: Letter No. Testing/BUB/2014-15, dated 20-11-2014

Sample supplied to lab by: Assistant Executive Engineer,
Byatarayanapura Sub-Division,
BBMP, Bangalore

Name of the Agency*: KRIDL, Bangalore.

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm

Grade of Concrete* : M_{20}

TABLE 1.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in Mm^2	Maximum Load in K.N	Compressive Strength (N/mm^2)	Avg. Value
1	001	23-10-14	20-11-14	28	22500	540	24.00	**23.70**
	002	"	"	"	"	535	23.77	
	003	"	"	"	"	525	23.33	

*As Furnished by Client.

The Results relate only to the items tested

G.R. HARISH
Professor
Department of Civil Engineering
Jnana Bharathi Compus
BANGALORE UNIVERSITY
Bangalore-560 056.

21/11/2014

Dr. MANJESH .L
ME (Civil Engg). Ph D MISTE.MIRC
Associate Professor
Department of Civil Engineering
Bangalore University Jnanabharathi Campus
BANGALORE- 560 056
e- mail. manjeshl@yahoo.com

Assistant Executive Engineer
Byatarayanapura Sub Division
B.B.M.P. Bangalore

FOR QUALITY & EXCELLENCE IN HIGHER EDUCATION
★ ★ ★ ★ ★
Accredited by NAAC

BANGALORE UNIVERSITY
DEPARTMENT OF CIVIL ENGINEERING

Phone Off: 080-22961935 / 1946
E-mail: centrans9@gmail.com

JNANA BHARATHI
BANGALORE - 560 056

BUB/CTE/2014-15

DATE: 22-11-2014

1. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 28 days Compressive Strength).
{Project*: Construction of RCC Drains at Kogilu Layout in Ward No.05, Byatarayanapura Sub-Division}

Ref.: Letter No. Testing/BUB/2014-15, dated 22-11-2014

Sample supplied to lab by: Assistant Executive Engineer,
Byatarayanapura Sub-Division,
BBMP, Bangalore

Name of the Agency*: KRIDL, Bangalore.

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm

Grade of Concrete* : M_{20}

TABLE 1.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in Mm^2	Maximum Load in K.N	Compressive Strength (N/mm^2)	Avg. Value
1	001	25-10-14	22-11-14	28	22500	540	24.00	**23.92**
	002	"	"	"	"	525	23.33	
	003	"	"	"	"	550	24.44	

*As Furnished by Client.

The Results relate only to the items tested

G R. HARISH
Professor
Department of Civil Engineering
Jnana Bharathi Compus
BANGALORE UNIVERSITY
Bangalore-560 056.

22/11/2014

Dr. MANJESH .L
ME (Civil Engg .). Ph D MISTE.MIRC
Associate Professor
Department of Civil Engineering
Bangalore University Jnanabharathi Campus
BANGALORE- 560 056
e- mail. manjeshb@yahoo.com

Assistant Executive Engineer
Byatarayanapura Sub Division
B.B.M.P. Bangalore

FOR QUALITY & EXCELLENCE IN HIGHER EDUCATION
★ ★ ★ ★ ★
Accredited by NAAC

BANGALORE UNIVERSITY
DEPARTMENT OF CIVIL ENGINEERING

Phone Off: 080-22961935 / 1946
E-mail: centrans9@gmail.com

JNANA BHARATHI
BANGALORE - 560 056

BUB/CTE/2014-15

DATE: 25-11-2014

1. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 28 days Compressive Strength).
{Project*: Construction of RCC Drains at Kogilu Layout in Ward No.05, Byatarayanapura Sub-Division}

Ref.: Letter No. Testing/BUB/2014-15, dated 24-11-2014

Sample supplied to lab by: Assistant Executive Engineer,
Byatarayanapura Sub-Division,
BBMP, Bangalore

Name of the Agency*: KRIDL, Bangalore.

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm

Grade of Concrete* : M_{20}

TABLE 1.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in Mm^2	Maximum Load in K.N	Compressive Strength (N/mm^2)	Avg. Value
1	001	27-10-14	24-11-14	28	22500	535	23.77	**27.07**
	002	"	"	"	"	550	24.44	
	003	"	"	"	"	540	24.00	

*As Furnished by Client.

The Results relate only to the items tested

G.R. HARISH
Professor
Department of Civil Engineering
Jnana Bharathi Campus
BANGALORE UNIVERSITY,
Bangalore-560 056.

25/11/2014
Dr. MANJESH .L
ME (Civil Engg .). Ph D MISTE.MIRC
Associate Professor
Department of Civil Engineering
Bangalore University Jnanabharathi Campus
BANGALORE- 560 056
e- mail: manjeshl@yahoo.com

Assistant Executive Engineer
Byatarayanapura Sub Division
B.B.M.P. Bangalore